

PROJECT DESCRIPTION

I. GENERAL

This project involves the installation of a new traffic signal at the intersection of Post Office Road and St. Charles Parkway in Charles County. This project is required due to the Post Office Road Improvements Project. Post Office Road is assumed to run in a north-south direction.

II. INTERSECTION OPERATION

This intersection will operate in a NEMA four-phase, fully actuated mode. The left turns on St. Charles Parkway will operate with protected/permitted phasing.

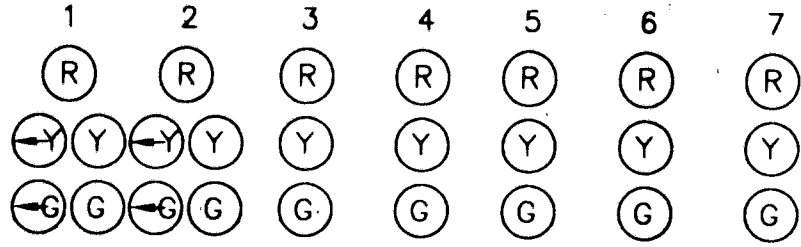
III. SPECIAL NOTES

The traffic signal is required by the County as part of the Post Office Road Improvements.

EQUIPMENT LIST

A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

QUANTITY	UNIT	SPEC SECTION	DESCRIPTION
Lump Sum	LS	108	Mobilization.
Lump Sum	LS	104	Maintenance of Traffic. (traffic control).
250	SF	104	Temporary construction signs
10	UD	104	Flashing arrow panels
1	EA	818	27' steel mast arm pole with 38' mast arm and 50' mast arm.
1	EA	818	27' steel mast arm pole with 60' mast arm
4	EA		1-3/4" x 90" Anchor Bolts
4	EA		2" x 90" Anchor Bolts
555	SF	815	Saw cut.
1060	LF	810	Loop detector wire (No. 14 A.W.G.) encased in flexible tubing.
10	EA	811	Handhole
1760	LF	810	2 conductor electrical cable (aluminum shielded).
450	LF	810	2 conductor tray cable (No. 12 A.W.G.)
360	LF	810	5 conductor electrical cable (No. 14 A.W.G.)
433	LF	810	7 conductor electrical cable (No. 14 A.W.G.)
205	LF	805	1" galvanized steel conduit sleeve for detector wire
125	LF	805	3" PVC schedule 80 conduit (No. 8 A.W.G.)
15	LF	810	3 conductor electrical cable (No. 8 A.W.G.)
2	EA	806	15' Lighting arm
2	EA	806	250W H.P.S. Lamp and luminaire
109	LF	805	2" PVC schedule 80 conduit (slotted)
60	LF	805	2" PVC schedule 80 conduit (trenched)
6	LF	805	4" PVC conduit (trenched)
1	EA	805	4" PVC elbow into cabinet
110	LF	SP-555	Painted pavement markings—white 24" wide for stop line
700	LF	805	1" PVC conduit (trenched)
65	LF	805	2" PVC conduit (trenched)
9	CY	801	Concrete foundations for signal structure
1	EA	807	F & I Control and Distribution Equipment
1	EA		As-built plan on CADD (diskette)
4	CY	205	Test pit excavation

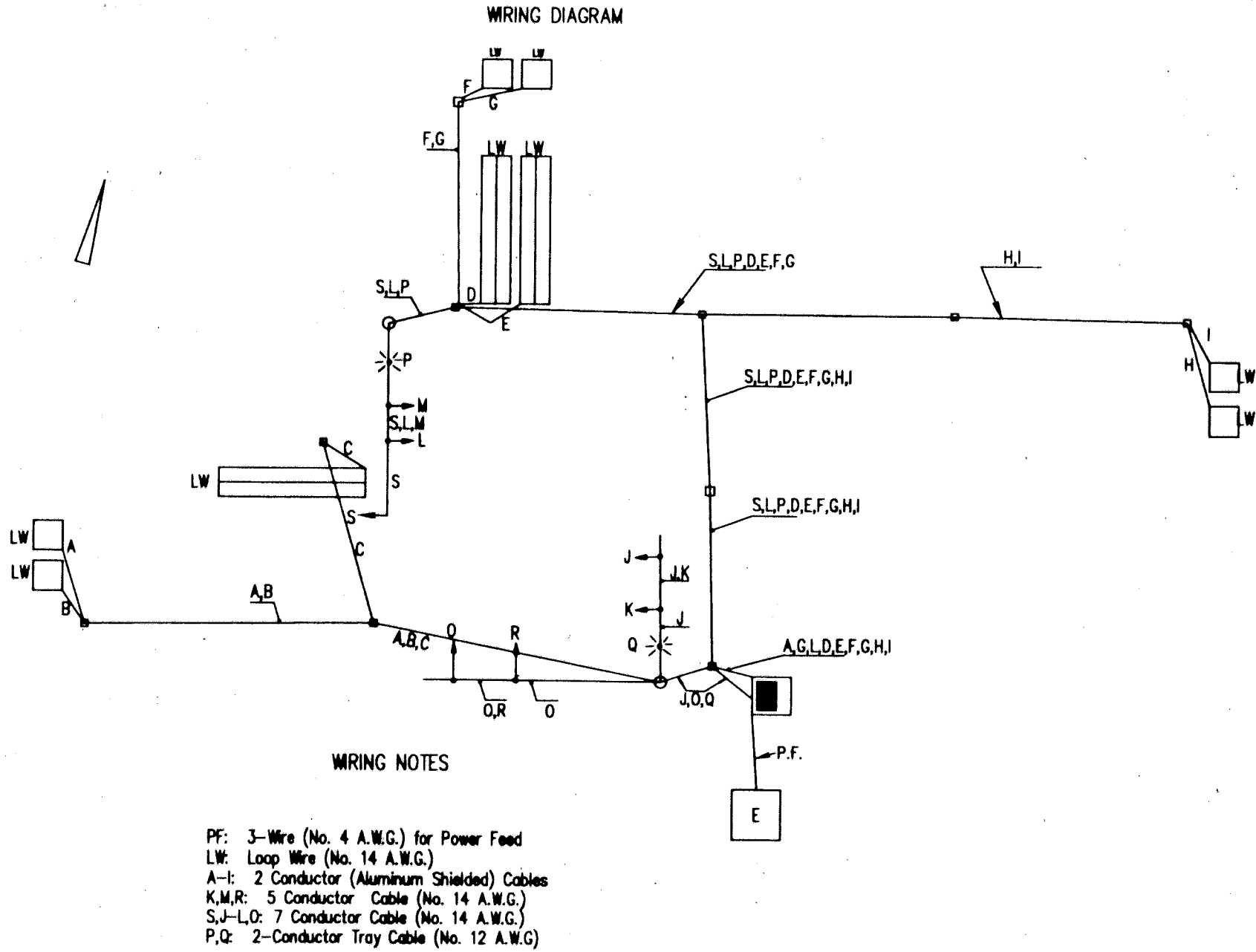


PHASE 1&6	←G+G	←G+G	G	R	R	R	R	↓
1 CHANGE	←Y+G	←Y+G	G	R	R	R	R	→
PHASE 2&6	G	G	G	G	G	R	R	→
2&6 CHANGE	Y	Y	Y	Y	Y	R	R	→
PHASE 4	R	R	R	R	R	G	G	↓
4 CHANGE	R	R	R	R	R	Y	Y	↓
FLASHING OPERATION	FL/Y	FL/Y	FL/Y	FL/Y	FL/Y	FL/R	FL/R	↑

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A. EQUIPMENT TO BE SUPPLIED BY S.H.A. AND INSTALLED BY THE CONTRACTOR.

QUANTITY	UNIT	SPEC SECTION	DESCRIPTION
1	EA	814	12", ONE-WAY, FIVE SECTION (R,G,Y,YA,GA) ADJUSTABLE TRAFFIC SIGNAL HEAD HAVING PROPER MAST ARM HANGERS AND TUNNEL VISORS.
5	EA	814	12", ONE-WAY, THREE SECTION (R,G,Y) ADJUSTABLE TRAFFIC SIGNAL HEAD HAVING PROPER MAST ARM HANGERS AND TUNNEL VISORS.
2	EA	816	FOUR CHANNEL LOOP DETECTOR AMPLIFIER WITH TIME DELAY OUTPUT.
1	EA	813	R 10-12 36" x 42" SIGN WITH MAST ARM BRACKET
2	EA	813	W 3-3 36" x 36" TEMPORARY SIGN.
1	EA	816	EIGHT PHASE, FULL TRAFFIC ACTUATED, SOLID STATE DIGITAL CONTROLLER WITH HARNESS, TELEMETRYISOLATION BOARD, INTERSECTION MONITOR WITH HARNESS AND BATTERY BACKUP HOUSED IN A BASE MOUNTED CABINET (TO BE USED IN A NEMA SIZE 6 THREE PHASE FULL TRAFFIC ACTUATED MODE).
1	EA	814	8" / 12", ONE-WAY, FIVE SECTION (8" R,Y,G, 12" YA,GA) ADJUSTABLE TRAFFIC SIGNAL HEAD WITH PROPER MAST ARM MOUNTING HARDWARE AND TUNNEL VISORS.



WIRING NOTES  
PF: 3-Wire (No. 4 A.W.G.) for Power Feed  
LW: Loop Wire (No. 14 A.W.G.)  
A-E: 2 Conductor (Aluminum Shielded) Cables  
K,M,R: 5 Conductor Cable (No. 14 A.W.G.)  
S,J-L,Q: 7 Conductor Cable (No. 14 A.W.G.)  
P,Q: 2-Conductor Tray Cable (No. 12 A.W.G.)

MDOT - STATE HIGHWAY ADMINISTRATION  
Office of Traffic & Safety  
TRAFFIC ENGINEERING DESIGN DIVISION

DRAWN BY: MARTIN	POST OFFICE ROAD AT ST. CHARLES PARKWAY
DES. BY: D.H.	GENERAL INFORMATION SHEET
CHK. BY: [Signature]	LOG MILE NO.: COUNTY: CHARLES
DATE: NOVEMBER 4, 1996	TS/STD. NO. 3633 - GI
SCALE: 1" = 20'	SHEET NO. 2 OF 2

MCV ASSOCIATES, INC.  
4605-C PINCREST OFFICE PARK DRIVE  
ALEXANDRIA, VIRGINIA 22312  
(703) 914-4850